

Remarks:

Claims 1-27 were pending. Claims 10, 15, 16, and 27 have been amended without prejudice to remedy typographical errors. No claims have been either canceled, or added. Hence, claims 1-27 remain pending.

Rejections under 35 U.S.C. § 102(e)

The Office Action of 12/28/05 rejects claims 1, 2, and 4 – 14 as anticipated under 35 U.S.C. § 102(e) by Grabelsky et al. (U.S. Patent No. 6,766,377) (Grabelsky). Applicant respectfully traverses these rejections. Prior to discussing each of the claim rejections in detail, a brief overview of Grabelsky is provided.

Grabelsky's system is designed to remedy specific problems with control of media gateways (MGs) by media gateway controllers (MGCs). Grabelsky, col. 1, l. 58 – col. 2, l. 19. Specifically, an MGC has no visibility into how the actual media resources are configured behind the MGC-MG interface in order to support the capabilities required by the interface. Id., col. 2, ll. 10 – 15. To remedy this problem, Grabelsky's specialized system includes an MG proxy that groups a plurality of standalone MGs, and presents each group of MGs as a distinct virtual MG to the MGCs. Id., col. 4, ll. 18 – 20. MGCs use MEGACO or H.248 *control signalling* protocols to control MGs through the MG proxy. Id., col. 4, ll. 66 – 67; col. 8, ll. 39 – 41. The MG proxy 300 translates *commands* issued by the MGC into actions on an actual MG. Id., col. 4, l. 66 – col. 5, l. 2 (emphasis added). For example, commands such as “ADD” and “DELETE” can be issued to MGs. Id., col. 7, ll. 60 – 61. Thus, Grabelsky's system and method is directed at control of MGs by MGCs through a specific *control command translation* process. See e.g., Id., col. 8, l. 55 – col. 9, l. 6.

By contrast, claims in the present Application are directed at routing of media. For example, Claim 1 is reproduced below:

Claim 1. A method comprising:

 performing Voice over Internet Protocol (VoIP) routing in a network including forcing packets carrying media in a VoIP call through managed network elements of a specific Internet Protocol (IP) address with a call signaling and selected media proxy.

Claim 1 includes a step of forcing *packets carrying media* through managed network elements of a specific IP address with a call signaling and selected media proxy. Applicant has

reviewed Grabelsky and cannot find a teaching or suggestion of forcing packets carrying media data, as recited in Claim 1. The Office Action asserts that Grabelsky teaches this step in column 4, lines 1 – 46, which are reproduced here, for ease of illustration:

“The MGC 110 is coupled to a proxy 115. The proxy 115, MGC 110 and a SS7 gateway 100 are connected to an IP network 112. A first Media Gateway (MG) 104, second MG 106, third MG 108, fourth MG 116, fifth MG 118, and sixth MG 120 are also coupled to the IP network 112. A PSTN switch 102 is coupled to the SS7 gateway 100 and the first MG 104, the second MG 106, and the third MG 108.

The proxy 115 is also coupled to a second MGC 114, which is coupled to a second SS7 gateway 122. The MGC 110 is also coupled to the first MG 104, the second MG 106, and the third MG 108. The MGC 114 is also coupled to the fourth MG 116, the fifth MG 118, and the sixth MG 120. The second SS7 gateway 122 is coupled to a second PSTN switch 124, which is coupled to the fourth MG 116, the fifth MG 118, and the sixth MG 120. The proxy 115 is connected to the gateways 104, 106, 108, 16, 118, and 120. However, more than one proxy may be used.

The MG proxy groups several standalone MGs, and each group of MGs is presented as a distinct virtual MG to the outside world, for example, to the MGC 110 or 114. The media resources used in each virtual MG belong to multiple standalone MGs; there is no parent MG to the complete set of media resources represented by all of the standalone MGs. The MG proxy coordinates and manages communications between the MGC and the standalone MGs.

The events that may cause the *MGC to issue commands to the MGs* include *signals* from the PSTN, e.g., via the SS7 network, or *signals* from a peer MGC, via the IP network. Once the MGC determines the action required by the external event, it *issues an appropriate command* to one or more of the MGs under its *control*.

A MG proxy could be used to configure any standalone MGs that are under the control of a MGC, and to which it can communicate. The MGC could be external to several independent MGs, or could be part of a larger system of MGs in which the MG proxy is integral to the system configuration. A MG proxy could be placed anywhere in the path between a MGC and a MG. For example, the MG proxy could be placed between an external MGC and one or more standalone MGs. But it could also be placed as a secondary MG proxy between a MGC and a primary MG proxy that is used to build virtual MGs out of standalone MGs control of the primary. That is, MG proxies could be configured hierarchically.” (emphasis added).

The foregoing cited portion of Grabelsky discloses that Grabelsky’s MG proxy enables an MGC to *configure* MGs under the MGC’s control. An MGC does this by issuing *commands*

to the MGs. These commands may be based on *signals* from the PSTN or another MGC. Notably, the cited section does not disclose or suggest forcing packets carrying media through a managed network element with a call signaling and selected media proxy. For this reason alone, Grabelsky fails to teach or disclose all the limitations of Claim 1.

Furthermore, Grabelsky's system is not suited for forcing packets carrying media through a managed network element with a call signaling and selected media proxy. As discussed above, Grabelsky's system is for the purpose of solving the problems associated with *controlling* MGs with MGCs. This is consistent with Grabelsky's description of its MG proxy, which "translates *commands* issued by the MGC into *actions* on the MG." Grabelsky, col. 5, ll. 1 – 2 (emphasis added).

Because claims 2 and 4 – 14 each depend from claim 1 in some form, these claims inherit all the limitations of claim 1. Therefore, for at least the same reasons as claim 1, claims 2 and 4 – 14 are neither taught nor suggested by Grabelsky.

With specific regard to claims 11 and 12, the Office states that "the Proxy 115 includes a table with a list of virtual IP addresses associated [with] the media endpoints, gateways, and media proxy". Applicant traverses this assertion.

Grabelsky discusses each virtual media gateway having a virtual destination address. Grabelsky, col. 2, ll. 49 – 50. However, Grabelsky does not disclose a *list* of virtual IP addresses. Column 6, lines 13 – 46, cited in the Office Action, disclose a mapping table containing an actual IP address for each standalone MG in a virtual MG. Id., col. 6, ll. 13 – 15. In addition, Fig. 8 illustrates a command message including a *single* virtual address associated with multiple sub-commands for MGs in the virtual MG.

Admittedly, Fig. 2 of Grabelsky illustrates three virtual MGs (206, 202, 210) associated with a media gateway proxy 202. However, Grabelsky does not enable one skilled in the art to address multiple virtual MGs in a MG proxy. The Office's attention is directed to the discussion of Fig. 9 at column 8, lines 28 – 65, reproduced in part here:

"Each of the entities illustrated in FIG. 9 has an associated IP address. For example, the external MGC 902 has an IP address of "123.123.123.1." ***The MG Proxy 904 has an IP address of "123.123.123.2.*** The standalone MG 906 has an IP address of "123.123.123.3." The standalone MG 908 has an IP address of "123.123.123.4." Finally, the MG 910 has an IP address of "123.123.123.5."...

..The frontend of the proxy determines the source of the message (the external MGC 902) analyzes the destination address ("123.123.123.2") and passes the destination address ("123.123.123.2") and the message to middleware of the proxy.

The middleware *takes the destination address ("123.123.123.2") and applies it to an address table. The address table has an entry for the destination address (virtual MG1).* The middleware now knows that the destination address is a virtual address and locates a mapping table using MG1 as an index." (emphasis added)

The foregoing passage indicates that the IP address of the MG proxy 904 is the same as the virtual destination address of virtual MG1. Thus, a virtual MG of the proxy 904 is addressed *using the IP address of the MG proxy 904.* Grabelsky simply equates the single IP address of the MG proxy 904 with the single destination address of virtual MG1. As such, Grabelsky does not provide a *list* of virtual IP addresses in the MG proxy that represent media network endpoints, gateways and other media proxies.

Grabelsky only discusses virtual IP addresses for media gateways. According to Grabelsky, the "virtual destination address is an address *of a virtual Media Gateway.*" Applicant cannot find, nor has the Office cited, a part of Grabelsky that discloses or reasonably suggests a virtual IP address that represents *media network endpoints*, gateways and *other media proxies.* In addition, Applicant cannot find, nor has the Office cited, a part of Grabelsky that discloses a *static* or *dynamic* virtual destination address.

For at least these additional reasons, claims 11 and 12 are not anticipated or rendered obvious by Grabelsky.

With specific reference to claims 9, 13, and 14, the Office Action fails to provide sufficient support for these rejections. Specifically, the Office Action states the following:

"Re claims 9, 13, and 14, refer to Claim 8, wherein the address translation is performed in the Proxy 115 (NAT), wherein the NAT function hides the addresses."

The above cited section of the Office Action merely inserts words and phrases from claims 9, 13, and 14 into the rejection without citing, with any reasonable specificity, a part of Grabelsky that supports the rejections, as is required by patent regulations. ("When a reference is complex or shows or describes inventions other than that claimed by the applicant, the *particular part* relied on *must* be designated as nearly as practicable." See 37 C.F.R. §

1.104(c)(2) (emphasis added)). The rejection of claims 9, 13, and 14 rely on the rejection of claim 8, which relies on the rejection of claim 5, which relies on the rejection of claim 4, which in turn relies on the rejection of claim 1. The rejection of claim 1 does not provide any reference to network address translation (NAT) in Grabelsky, let alone using NAT to *hide a terminating endpoint or an originating endpoint*. As such, a *prima facie* case of anticipation has not been set forth by the Office.

For at least these additional reasons claims 9, 13, and 14 are believed to be allowable.

Rejections under 35 U.S.C. § 103

The Office Action apparently rejects claims 3, 19, and 20 – 27 under 35 U.S.C. § 103 as being as being unpatentable over Grabelsky in view of official notice. The Office Action rejects claims 15 – 18 under 35 U.S.C. § 103 as being unpatentable over Grabelsky in view of Fitzgerald (U.S. Patent No. 6,973,042). Applicant traverses these rejections.

With regard to claims 3, 19, and 20 – 27, the Office acknowledges that Grabelsky fails to explicitly teach that packets comply with RTP. Applicant agrees. However, the Office asserts that one of skill in the art would have been motivated to modify Grabelsky to apply to RTP. Applicant respectfully disagrees.

As discussed above, Grabelsky discloses a system for translating MGC *control commands* into commands for a group of MGs. For example, Grabelsky discusses at length the use of H.248 and MEGACO protocols. In distinguishing media from control signaling, Grabelsky states that a “Media Gateway Controller (MGC) both controls the MG remotely, and handles IP-side signaling and call control with peer elements on the IP network.” Grabelsky, col. 1, ll. 53 – 56. By contrast, RTP is used for real-time flows such as voice and video streams. Application, [0002].

The Office’s assertion that Grabelsky can be modified for RTP is therefore unsupported and clearly in dispute. However, “[o]fficial notice unsupported by documentary evidence should *only be taken* by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of *instant and unquestionable* demonstration as being well-known.” MPEP § 2144.03 A (emphasis added). Because Grabelsky explicitly does not relate to RTP, but rather control command protocols, the notice of facts taken by the Office clearly do not defy dispute. Therefore, a *prima facie* case of obviousness has not been established for rejection

of claims 3, 19, and 20 – 27. If the Office chooses to maintain these rejections, Applicant respectfully requests that the Office provide support for its assertions.

In addition, independent claims 19 and 22 are believed to be allowable for at least the reasons provided above with respect to claim 1.

Turning to claims 15 – 18, the Office acknowledges, and Applicant agrees, that Grabelsky fails to explicitly teach the selecting “call signaling and media proxy servers” that provide a predetermined QoS. The Office asserts that Fitzgerald makes up for Grabelsky’s deficiencies. Applicant disagrees. Prior to discussing each of the rejections of claims 15 – 18 in detail, a general description of Fitzgerald is provided.

Fitzgerald solves the specific problem of reducing end to end delay in a telephone conversation that takes place over a packet switched network. Fitzgerald, col. 1, ll. 35 – 58. Fitzgerald identifies quality of service (QoS) problems between two routers using loopback delay between adjacent pairs of routers. Id., col. 2, ll. 29 – 33.

As an initial matter, claims 15 – 18 each depend in some form from claims 5 and 1. Fitzgerald fails to make up for Grabelsky’s deficiencies with respect to claims 5 and 1. Therefore, for at least the reasons given above, claims 15 – 18 are neither taught nor suggested by Grabelsky and Fitzgerald, either separately or in combination.

In addition, each of claims 15 – 18 include additional limitations that further distinguish them from Grabelsky and Fitzgerald. For example, claim 16 is directed to testing a quality of a network connection from the originating VoIP network endpoint point of presence (POP) to each of the call signaling and media proxy servers. Neither Fitzgerald nor Grabelsky mention a point of presence (POP). For at least this additional reason, claim 16 is believed to be allowable. Therefore, Grabelsky and Fitzgerald fail to teach or suggest all elements of any of claims 15 – 18, either in combination or separately.

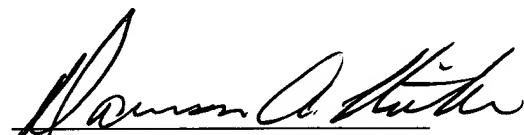
Conclusion

In view of the foregoing, Applicants submit that all claims now pending in this Application are in condition for allowance, and Applicant respectfully requests withdrawal of the rejections and allowance of the claims.

If the Examiner believes a telephone conference would aid in the prosecution of this case in any way, please call the undersigned at 303-447-7739.

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Respectfully submitted,



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